A Proposal for a North Carolina TeleHealth Network

Piloting the NCTN

In response to:

The Federal Communication Commission's Rural Health Care Pilot Program.

WC Docket No. 02-60

By:

The Southern Piedmont Partnership for Public Health and the North Carolina Association of Free Clinics.



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I. Proposal Background

This "Proposal Background" section of the proposal presents the core ideas in a sequence that allows for quick understanding of the project. The subsequent "Response to Required Submission Elements" section covers the proposal with one sub-section for each of the issues that the FCC call for proposals requested be covered. The second section's role in the proposal is to provide more detail and provide an organization of the material that allows for easy review by the FCC's proposal evaluation group.

At the core of our proposal is the conviction that connecting health care providers and their patients using broadband telehealth networks is an important and underused method of support for improving health in rural areas. Further, achieving this provider-patient connectivity in rural areas is a way to improve the health of rural Americans that FCC policies can support with the addition of the types of policy adjustments that the call for proposals requested. This form of telehealth networking involves patient portals, home monitoring, personal health records (interconnected with clinicians), home vital sign monitoring and a growing list of innovations that all focus on "connecting" care providers with patients in ways that improve care, lower costs, raise quality of care and life, improve safety, and empower patients to better manage their health status. These telehealth networking methods also provide new ways to make use of deidentified data for medical research and health services planning and provide a way to supply the data needs of most traditional telemedicine consultative and therapeutic services.

Our proposal is designed to operate in two phases: phase 1 - planning of the network model and phase 2 - piloting of selected uses of the network. Each phase is expected to require one year. We understand that even though we are proposing both years' activities here, we are expecting to apply for the second year's funding at a later time.

This work is undertaken as a joint project of the Southern Piedmont Partnership for Public Health (SPPPH- a consortium of public health agencies and authorities) and the North Carolina Association of Free Clinics (NCAFC). Selected members of both organizations will participate. The Cabarrus Health Alliance (a member of the SPPPH) will act as the fiscal agent for the project. As the attached letters of support indicate several organizations that are important to a state-wide network's success are supporters and participants in the project. Notably, e-NC, NCHICA, the NC Medicaid program, and several telecom companies are supporters.

The proposal has four main points of focus, described in the sub-sections below.

A. Regional services and outreach to the public in homes, workplaces (and other public locales)

Our proposal focuses on connecting regional health-related service providers (e.g. public health clinics, free clinics, and private medical practices) with patients in their homes, at work, and on the move. As compared with a network that only focused on connecting care providers with each

- allows for the creation of programs that have a wider set of options in providing healthrelated services that make use of broadband communications.
- allows healthcare providers to leverage their regional relationships and size to form and sustain programs (e.g. the regional public health surveillance nets, the AHEC (Areas Health Education Centers) groups, county medical societies, catchment area for a community hospital, bio-preparedness/response regions,), and
- is also planned to be a complement and support for the more traditional telemedicine networks. Notably, the information systems envisioned in our proposal can also serve to provide the common data needs of typical tele-consulting and tele-therapy programs.

Reaching citizens in their homes and on the go is an especially attractive opportunity to offer support for health at a lower cost per citizen than in-person health-related services. Reaching patients, electronically, also provides opportunities to overcome the logistical problems (e.g. transportation time and cost) associated with bringing care providers and patients physically together. These logistical problems are especially pronounced in rural settings. This type of connectivity to patients could be a major enhancement for care providers by enabling improved and more cost-effective care models, disease management, and prevention services made available to all socioeconomic groups via "tools" such as personalized health messaging, self-administered monitoring that supports provider-prescribed healthy behaviors, and aids to prescription drug use compliance.

In particular for the Cabarrus Health Alliance (CHA), this way of reaching the public is part of a larger strategy for a health community anchored in the CHA's "Model Public Health Department of the 21st Century" project. This MPHD project is intended to form and operate an exemplar public health agency for the nation on the North Carolina Research Campus- a collaborative biotechnology research, education, and translational science initiative involving public and private health-related enterprises in NC. The CHA has a history as a national leader among local public health agencies and considers this proposal part of its larger strategy to grow its contribution as a national model of a modern public health agency.

The state-wide NC Association of Free Clinics (NCAFC) is at a point in its evolution where the development of a common information infrastructure to support both intra-clinic activity and electronic connections with clinic clients is a priority. This project is designed to support and be supported by the creation and refinement of an information services strategy of the NCAFC as it seeks to engage its rural clients.

The health-improving benefits of the connections that we propose here are most visible at the point that the applications act on the data. For example, the point at which a person interacts with a care provider over a secure messaging link. But, less visible network components will be required to support these applications. Providing a health information exchange mechanism for routine, timely, accurate, relevant, and privacy-respectful data sharing is an underlying requirement for most health-improving applications to be effective. For example, collecting a reliable medications list for both a patient and their care team to review requires gathering data from many sources. The work of building a person-oriented health information exchange with these goals has begun in the southern piedmont region of NC and we plan for the facilities envisioned in this proposal to benefit from its planning and development.

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The marketing and training efforts (explained later) also stand to benefit from the many regionalized education resources in the state. Notably the e-NC telecenters and the AHEC training centers can be used as training facilities.

In summary, for the SPPPH, the NCAFC and for the larger group of supportive organizations noted later, this proposal is part of a larger active state-wide strategy to be innovative in the area of using information systems to improve health by connecting care providers with patients in rural areas. Reaching rural providers and patients with this strategy is both especially useful and especially difficult. We are hopeful that the funds provided to this proposal by the FCC will allow for more elements of the strategy to be carried out sooner and to have greater effect on a broader group rural care providers and rural residents.

B. Fixed and mobile access in rural areas:

North Carolina has seen an impressive deployment of broadband availability in the last few years. At this point the parts of the state that do not generally have broadband access are the rural portions (about 30% of NC residents). Contacts with telecommunications vendors indicate to us that a key reason for the lack of coverage in these areas is the current lack of a viable business model for providing the service. Because of this, we propose to create a design(s) for a sustainable business and technical model for reaching rural NC in ways that support the use of broadband for services that improve health and health care. We expect to request design(s) that can support mobile and fixed applications and can be used in both normal and emergency situations. We plan to select service vendors on a technology neutral basis.

C. Piloting a model for a state-wide network.

Our proposal seeks to build a state-wide network by engaging a set of regional public health groups and an existing state-wide association of free clinics as "anchor" clients to the network. These anchors are planned to serve as a basis and attraction for others who will eventually be benefited by using the network. The maps included in a later section show how these regions, the free clinics, and the pilot sites span the state and yet are organizationally compact enough to cooperate readily in starting a network.

This proposal comes forth at a time when there is much interest in building electronic networks that in some way contribute to health in NC. We assume in our planning that other parties with meritorious ideas in this area will come forward over time. It is well recognized that some elements of coordination among these parties will yield better results. NCHICA and e-NC are acting as coordinative agents for these parties in NC and have specifically agreed to help coordinate the interactions between the network proposed here and any others in the state that may come forward. Therefore, while this proposal can result in a network model that could be used by virtually all parties in NC, we also stand ready to cooperate with others in combining the best features of different network models with the common goal of improving health – especially in rural NC.

Our proposal involves near-term work in one region of North Carolina. The region served by the Southern Piedmont Partnership for Public Health (SPPPH) comprises 11 counties, a total population of approximately 1,800,000 (2000 Census) and a rural population (by USAC eligibility standards) of approximately 300,000 people. We also plan to develop a diffusion model to aid

FCC RCH Pilot Grant Proposal –SPPPH/NCFCA –5/7/07 – Page 6 of 38 other regions of NC in the process of adopting the telehealth network model first created in the SPPPH and associated NCAFC clinics. This diffusion model will describe how we will foster adoption of the network throughout the state with the facilities that will be planned and piloted in this proposal.

The NCAFC is a state-wide association of 69 clinics that offer medical services free of charge to the public. We will plan and pilot our telehealth network with selected clinics, test critical proof-of-concept elements, and create a diffusion plan for the remaining clinics as part of this proposal in the first year. We will use the selected clinics as pilot sites in the second year.

To support the development of the diffusion model, we are collaborating with the Northeast NC Partnership for Public Health (NENCPPH). The NENCPPH is a public health collaborative of long standing in the northeastern part of the state. The region served by the NENCPPH has a total population of approximately 410,000 and a rural population (by USAC eligibility standards) of approximately 383,000 people.

The NENCPPH's role in creating this diffusion model is to act as a typical regional public health group planning for and implementing the telehealth network model. Because public health agencies routinely act as the programmatic connecting force for health-related resources in a community, the idea of first engaging these types of organizations in diffusing a telehealth network to a community of providers and patients has merit. We intend for the NENCPPH's involvement in the pilot in this diffusion role to lead to later development of the telehealth network model in this region of NC. Given a successful piloting and diffusing activity in these two regions of NC (consisting of 30 of NC's 100 counties), we expect to be able to expand to the other regions of NC over the following years.

Aside from diffusing the model from one region to another, cross-region connections are needed and planned to be modeled as a supplement to in-region connections. This need for cross-region connections is partially because many programs will benefit from statewide collaboratives and partially because, no matter where one draws regional boundaries, there will be some value in having a given region's programs provide service in portions of adjacent regions. For example, the migrant farm worker community tends to move from one part of NC to another during the year across region boundaries. Providing seamless health connections throughout NC will be valuable to this group. Also, the NENCPPH is currently developing the Public Health GIS portal that could be interconnected with these facilities to aid individual patients in locating services and aid in parts of health services planning that are more sensitive to geographic factors than to regional boundaries.

D. Guidance for FCC policy

It is our understanding from the FCC order that an important motive for the FCC in sponsoring this project is to learn what it might do to adjust its policies to encourage the use of telecommunications in ways that positively affect human health in rural areas of the nation. Our proposal is built to explore ideas for policy change in areas that we think have been the chief causes for low use of the available USAC funds by rural health care providers to date. In brief, the existing incentives for health care providers in rural areas to use broadband are limited by three factors:

- Access - Rural providers and patients must have broadband services available at widely affordable prices. In North Carolina about 30% of residents don't have access to a broadband

FCC RCH Pilot Grant Proposal –SPPPH/NCFCA –5/7/07 – Page 7 of 38 service; these residents are mostly in rural areas of the state. We propose to solicit designs for these access mechanisms and business models and to pilot the most promising one(s). We plan for this work to show how and at what level FCC policy related to funding and other arrangements might usefully change to support access provision in support of health in rural areas. For example, policy might focus more on encouraging community projects supported by public/private partnerships that develop infrastructure to support benefits to the health of rural citizens.

- Applications Rural providers and patients must also have uses for the network that are compelling and contribute to health. We propose to define, prioritize and pilot the most promising of these. We plan for this work to show how FCC policy changes might encourage the development, deployment and usage of applications that make access beneficial to care providers and patients in rural areas. For example, new policy might do more to support health enterprises that make use of this form of connectivity by offering differential subsidies, establishing requirements for use of standards, and/or encouraging involvement in consortia with this sort of benefit as part of their missions.
- Marketing/training Wide-spread adoption will depend on understanding how to influence both health providers and patients so that they make use of the potential in the network. We propose to both study the approaches needed and to pilot the most promising ones. We plan for this work to show how FCC policy might be changed to assure maximum benefit to health for rural providers and their patients. For example, these studies would help identify approaches to network adoption and use that would assure that there was a high percentage of network users in these rural (i.e. low-density population) areas. This high penetration in rural area would, in turn, make the per capita costs of fixed assets in the network less expensive per person served while providing more benefit to the population served by it.

II. Response to required submission elements

The pilot project submission instructions indicate that the FCC requires responses in several areas for a successful application. Each of the required areas is addressed in the remaining subsections of this document.

A. Organization that will be legally and financially responsible for the conduct of activities supported by the fund;

The Cabarrus Health Alliance (CHA) will be the fiscal agent for this proposal. The CHA is a non-profit public health authority in Cabarrus County North Carolina offering health care services to the public. The CHA has a history as a national leader among local public health agencies and considers this proposal part of its larger strategy to grow its contribution as a national model of a modern public health agency. The CHA is the lead agency for the Southern Piedmont Partnership for Public Health- one of six regional public health collaboratives in NC.

The other parties who, given resources, have committed to participate are:

Direct participants:

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<u>Selected members of the SPPPH</u>: The SPPPH consists of the public health agencies from the following counties: Alexander, Cabarrus, Catawba, Cleveland, Gaston, Iredell, Lincoln, Mecklenburg, Rowan, Stanly, and Union. The specific public health agencies who have agreed to participate in this project are in the following counties: Alexander, Cabarrus, Catawba, Gaston, Rowan, and Union. The Cabarrus Health Alliance (the public health authority in Cabarrus County) is recognized nationally by NACCHO and others as a highly innovative and successful public health authority. It seeks to be a model public health program for the nation.

NC Association of Free Clinics - The NCAFC is a non-profit association of non-profit free clinics in North Carolina. These clinics are all 501(c) (3) organizations providing health care free of charge to the public in the areas that they serve. This is often accomplished in close cooperation with local health departments, community hospitals, and private for-profit providers. The NCAFC is a co-applicant on this grant.

Northeast NC Partnership for Public Health – This partnership is acting as the example network adopter region in the diffusion plan for the telehealth network. The public health agencies in the NENCPPH are: Beaufort, Bertie (Albemarle District), Camden(Albemarle District), Chowan(Albemarle District), Currituck, (Albemarle District), Dare, Edgecombe, Gates (Albemarle District), Halifax, Hertford, Hyde, Martin, Northampton, Pamlico, Pasquotank(Albemarle District), Perquimans, (Albemarle District), Tyrrell, Warren, and Washington.

Advisory/Coordinating Groups:

NC Division of Medical Assistance— This is the division of NC's Department of Health and Human Services that is primarily responsible for the Medicaid program and related activities. NCDMA has a long-term interest in improving health for rural Medicaid recipients state-wide especially while better managing the need for and costs of services. This proposal is an opportunity for NCDMA to plan how to best leverage provider-patient electronic connections for these purposes.

<u>e-NC</u> – Is a non-profit grassroots initiative to encourage all North Carolina citizens to use technology, especially the Internet, to improve their quality of life and their economic prospects. e-NC has been very engaged and successful in the area of expanding Internet access across NC to support a variety of social benefits. Given resources, they will serve as an important coordinating element in the project especially in creating the network diffusion model.

NCHICA— The NC Healthcare Information and Communications Alliance, Inc. is a nonprofit collaboration of providers, professional associations/societies, government agencies, payers, researchers, and vendor organizations established by Executive Order of the Governor in 1994 with a mission of accelerating the adoption of information technology to improve health and care in North Carolina. The members include all of the key health institutions, government, and health-centric information service providers in NC. NCHICA's useful strength in this project is its ability to act as a trusted broker and coordinator across all entities in NC with an interest in health-related information services. This is expected to be especially helpful in forming the diffusion model and in subsequent diffusion activity.

<u>University of NC School of Public Health/ NC Institute of Public Health –</u> The NCIPH is the outreach arm of the UNC SPH and focuses on aiding the development of public health facilities in NC. The NCIPH's key potential to aid in this project is its relationship as a change agent with the

FCC RCH Pilot Grant Proposal –SPPPH/NCFCA –5/7/07 – Page 9 of 38 public health agencies across NC. Notably, the NCIPH is the coordinating body for the six public health regional collaboratives that are the focus of diffusion of the network model planned in this proposal

Community Care of North Carolina - The Community Care of North Carolina program is building community health networks organized and operated by community physicians, hospitals, health departments, and departments of social services. By establishing regional networks, the program is establishing the local systems that are needed to achieve long-term quality, cost, access and utilization objectives in the management of care for Medicaid recipients. North Carolina currently has fourteen CCNC networks working collaboratively with the State to better manage the care of the enrolled Medicaid population. CCNC networks are present and active in the areas with pilot clinics in this proposal.

<u>Public Health Informatics Institute – The PHII is the premier non-profit organization in the nation devoted to the development of informatics in the service of public health. We plan to engage them as an advisory group with long experience in how public health groups may employ information services in innovative ways.</u>

Note that there may be more organizations that come forward as advisors as the planning process starts. It is all but certain that these organizations will participate through their relationship with one of the entities above.

Selected potential technical service partners:

<u>The New AT&T (formerly BellSouth)</u> – A major supplier of telecommunications services in NC for businesses and residences.

Embarg - A major supplier of telecommunications services in NC for businesses and residences.

<u>ERC Broadband-</u> Provides internet access, data center services, and high-performance computing in western NC.

<u>SCANA Communications Corporation</u>—Specializes in long-haul and metro broadband services in the Carolinas and Georgia along with data center services.

<u>Time-Warner Cable Inc- A</u> key provider of cable-based services including cable-tv, broadband internet access, and digital phone services.

<u>Laxor Inc.-</u> An NC-based provider of Personal Health Records using a web-based model.

*- Note that we plan to invite other vendors to participate. The list above is only of those who have been involved to date.

B. Goals and objectives of the proposed network

The highest goal of the project is to define, plan, and pilot a telehealth network that focuses on connecting health care providers with rural patients in ways that improve the health and care of these patients. Accomplishing this goal involves creating a network model that provides sufficient incentives for all parties to adopt and use the network in ways that are fiscally and operationally sustainable. Determining the exact nature of the network model is, of course, the subject of the project. Our proposal focuses on four objectives in reaching its highest goal:

1) Create a network model that can be adopted on a regional basis.

The process of connecting people with their care providers using broadband services needs to be done on a scale that is large enough to be cost-efficient and small enough to be manageable. We believe that a regional scope (i.e. 5-20 counties in NC) is the optimal size for a single unit of adoption. This scope is big enough to include virtually all of the care providers for a given patient, includes enough patients to create a critical mass for new regional health services that depend on broadband to be cost-effective, and yet is not so large that the risk levels associated with adoption are beyond the risk tolerance of the parties involved. Additionally, a regional model creates opportunities to build and efficiently run enterprises that don't work well at either very local (county) scales or at state-level or national scales. For example, a regionally-focused network would make the building of a regional remote home-health monitoring enterprise that worked in collaboration with the regional medical centers, nursing homes, and home health field workers more attractive than working at other scales.

2) Create and pilot a network models that supports fixed and mobile applications Individuals move about in their daily lives and typically move among a set of fixed and predictable points (e.g. home, school, workplace, stores, and community institutions). To fully capture the potential to connect health providers with their patients, we, therefore, plan to create both mobile and fixed applications for the telehealth network. Mobile applications for individuals can support intra-daily reminders, capture of trend-line data and the aggregation of such data into a system that supports compliance with provider-advised healthy practices. Care providers are both fixed and mobile also (e.g. the typical fixed private practice and the mobile home health worker) and can benefit from connectivity to the records of patients and other information services in both circumstances. Lastly, technologies that can support mobile applications can also support many fixed applications. This phenomenon can be seen, for example, in the large degree to which people are using cell phones as their home phones.

3) Create a network model that can be adopted state-wide

As noted in objective #1 above, our eventual goal is for state-wide adoption of the network carried out on a regional basis. We propose to develop a region-sized network diffusion model as part of the work in this proposal. The NCAFC will develop its state-wide diffusion plan based on client site readiness and tactical advantage to pursuing a specific deployment plan. Given the close working relationship between free clinics and public health agencies, we plan for these deployment models to benefit from coordination.

This proposal comes forth at a time when there is much interest in building electronic networks that in some way contribute to health in NC. We assume in our planning that other parties with meritorious ideas in this area will come forward over time. It is well recognized that some elements of coordination among these parties will yield better results. NCHICA and e-NC are

FCC RCH Pilot Grant Proposal –SPPPH/NCFCA –5/7/07 – Page 11 of 38 acting as coordinative agents for these parties in NC and have specifically agreed to help coordinate the interactions between the network proposed here and any others in the state that may come forward. Therefore, while this proposal can result in a network model that could be used by virtually all parties in NC, we also stand ready to cooperate with others in combining the best features of different network models with the common goal of improving health – especially in rural NC.

4) Assure that the project informs FCC policy options for support of rural health care.

At the core of the FCC's request for applications is a desire to learn which policy options might result in significantly increased deployment and health beneficial use of broadband services in rural America. Our proposal is based on the concept that in order for there to be significant use of this (or any) telehealth network in support of rural health care three dimensions must be addressed:

- -Access Rural providers and patients must have broadband services available at widely affordable prices. e-NC has led a program in NC that has made great progress in building out broadband access in NC over the last few years. Still we have about 30% of the population, mostly in rural areas, who don't have affordable broadband service. Penetrating these rural areas with broadband will require new business models and, perhaps, innovative technical models. We propose to solicit designs for these access mechanisms and to pilot the most promising one(s). We plan for this work to show how and at what level FCC policy related to funding and other arrangements might usefully change to support access provision in support of health in rural areas. For example, policy might focus more on community projects supported by public/private partnerships that develop infrastructure to support benefits to the health of rural citizens. In year 1, as part of the planning process, we propose to explore ways to get maximal value from the advanced features of Internet2 (and/or National LambaRail) connections in meeting our network goals. We feel that it is critical to base a proposal for year 2 piloting and later operational usage of such connections on the network usage models and value exchange models that will emerge in year 1.
- Applications Rural providers and patients must also have uses for the network that are compelling and that contribute to health. We propose to define, prioritize and pilot the most promising of these. We plan for this work to show how FCC policy changes might encourage the development, deployment and usage of applications that make access beneficial to care providers and the public in rural areas. For example, new policy might do more to support health enterprises that make use of this form of connectivity by offering differential subsidies, imposing requirements for use of standards, and/or encouraging involvement in consortia with this sort of benefit as part of their missions. While the FCC's traditional approach to aiding rural health has been dominated by the provision of subsidies for individual transmission layer connections, we believe that new policies and FCC efforts that support the development and use of health-improving information-centric applications are essential to providing the strategic benefits to health that the 1996 Act and related regulations envisioned.
- <u>- Marketing/training –</u> Wide-spread adoption of the beneficial uses of the network will depend on understanding how to influence both health providers and patients so that they make use of the potential in the network. The process of creating health-improving information flows inherently involves engaging the community of care providers and the public in creating and sustaining compelling value exchanges. We propose to both study the approaches needed (in year 1) and to pilot the most promising ones (in year 2). We plan for this work to show how FCC

FCC RCH Pilot Grant Proposal –SPPPH/NCFCA –5/7/07 – Page 12 of 38 policy might be changed to assure maximum benefit to health for rural providers and their rural patients. For example, these studies would help identify approaches to network adoption and use that would assure that a high percentage of patients were network users in these low-density population areas. This high-penetration strategy makes more efficient use of the fixed costs of infrastructure while providing more benefit to the population served by it.

In each of the above three dimensions, we propose to carry out planning and some proof-of-concept work in year 1 and piloting of the prioritized elements in year 2.

C. Network's total costs for each year

One way to view the total costs is to consider the costs for each of the three major dimensions of work in each of the two phases of work. The budget summary show below is based on a detailed review of the workplan. We present only summary information in this section. More detail is available in sub-section H below. The underlying Excel spreadsheets are available upon request.

Year 1 (planning and design):

This phase will focus on planning and design work in each dimension. In summary:

- Access Element

To commission designs for a sustainable fixed and mobile telecommunications service(s) in support of health care in rural locales in NC. The system will be designed to support the applications that will connect health care providers and their patients.

- Application Element

To commission designs for a suite of high value applications using broadband-based connections between health care providers and patients.

- Marketing Element

To commission marketing studies that will inform a sustainable business model for the telehealth network.

This is a total for phase 1 of \$1,424,681 from all sources with \$1,065,459 from FCC funds and \$240,022 as contribution to the minimum 15% non-FCC funds. The applicants are actually contributing 18% of FCC eligible costs in phase 1. More detail is available in the Budget subsection below.

Year 2 –(piloting and evaluation)

This phase will focus on piloting and evaluation work in each dimension. In summary:

- Access element
- Pilot 2-3 of the most promising telecommunications service that were designed in the first phase.
 - Application Element
 Pilot a bundle (5-10) of the suite of applications designed in the first phase.
 - Marketing Element

Carry out the marketing efforts needed to engage the health care providers and their patients at the pilot sites.

The nature of a pilot project is to attempt new activities that may or may not be directly usable in operational systems, but from which something of use to the larger goal of the pilot can be obtained. Towards that end the budget and workplan include activities to evaluate the work with this purpose in mind.

FCC RCH Pilot Grant Proposal –SPPPH/NCFCA -5/7/07 — Page 14 of 38 This is a total for phase 2 of \$6,060,760 with \$4,958,526 from FCC funds and \$923,034 as contribution to the minimum 15% non-FCC funds. The applicants are actually contributing 16% of FCC eligible costs in phase 2. More detail is available in the Budget sub-section below.

D. How for-profit network participants will pay their fair share of the network costs.

In the case of for-profit providers, we propose to have them pay equivalent rates to an urban commercial service. Generally this will amount to \$35-\$75 per month per provider site for a typical broadband connection (e.g. DSL, Cable, or Wireless). Our pilot sites serve rural areas (in USAC terms) that contain over 250,000 residents. We intend to engage a small subset of these residents in the pilot process (year 2). We propose that the costs for members of the public (patients) will be part of the FCC-covered costs for the (for-profit or not-for profit) clinic with which each person is associated in the pilot. In the final model, the costs will not necessarily be managed this way. We plan for our market research and application work to point the way towards a sustainable value exchange in the final network model.

E. Source of financial support and anticipated revenues that will pay for costs not covered by the fund.

All of our eligible proposed costs are part of the funds provided by the FCC up to the 85% level. The remaining 15% of eligible contracted activities will come from successful contractors/vendors chosen for the project.

Note that we are proposing to purchase 85% of all information services using FCC-provided funds. We propose to include telehealth-based information services such as personal health record systems as piloted services, propose to use FCC funds in the design phase (year 1) to carry out the marketing studies needed to create a sustainable business plan, and propose to use FCC funds to support the operations including marketing and training in support of these information services in the second year. We expect to contract for project management services using FCC funds up to the 85% level. The other 15% for these activities, services and products will come from either the contractor or the project partners.

We have positioned this proposal as part of furthering a broader strategy of connecting care providers with their patients using information services. As such, there are other parts of the strategy that will be supportive of the goals of this proposal. A key portion of the strategy involves:

- collaborating with public health agencies and their partners on new business process models that extend public health services to the public and other partners using networked information systems,
- working at the national level with peers to create a set of model public health business processes and
- planning a person-oriented health information exchange to be used in conjunction with networked health-improving information services.

This work is currently funded by a grant from the Robert Wood Johnson Foundation and managed by the Public Health Informatics Institute as part of its CommonGround program with a \$600,000 three-year grant that started in December 2006. We will count the cost of the relevant CommonGround activities as part of the 15% funding for this proposal.

The NC Association of Free Clinics was recently awarded a \$91,000 grant from the Blue Cross and Blue Shield of North Carolina Foundation for the purpose of planning its information

FCC RCH Pilot Grant Proposal –SPPPH/NCFCA –5/7/07 – Page 16 of 38 infrastructure including planning for elements that are part of this proposal. We will count the costs of the relevant activities under this BCBSNCF grant as part of the 15% funding for this proposal.

The efforts of the other non-contracted project partners are contributed without cost to the FCC and without being considered part of the 15% matching funds.

F. Health care facilities that will be included in the network:

In the SPPPH region the health care clinics associated with the following public health agencies will participate in the pilot project: Alexander, Cabarrus, Catawba, Gaston, Rowan, and Union County. While these public health clinics will provide service to any member of the public, they predominantly provide health care for clients across their counties, including rural and non-rural areas and to residents of nearby counties.

The first "Pilot Clinic Location" table below notes the USAC-eligible rural tracts in these counties with populations served by these clinics for the SPPPH pilot sites

The second Pilot Clinic Location table shows the participating NC Association of Free Clinic sites and associated USAC information.

Through the involvement of the NC Division of Medical Assistance (Medicaid) and the Community Care North Carolina Network and the other project supporters, we expect to identify for-profit provider locations that will become pilot sites (in year 2).

Note that in the MSWord version of this document the tables are embedded Excel objects that reviewers may double click on to manipulate as Excel spreadsheets if desired. In other document forms, the Tables are available upon request.

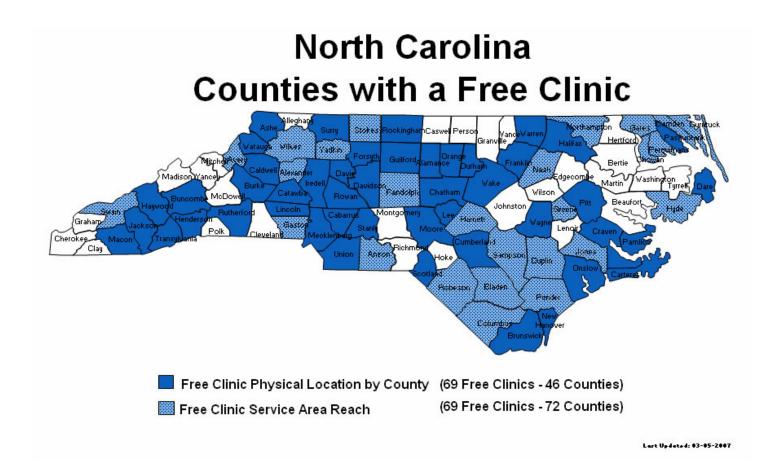
1. Address, zip code, Rural Urban Commuting Area (RUCA) code and phone number for each health care facility participating in the network

Pilot Clinic Location Information- SPPPH Sites						
Participant Name	Clinic Address, Phone	RUCA code of clinic	County	State-County- Tract Code of clinic location	Served by this	Served by this Clinic in nearby counties participating in
Public Health Agencies						
Alexander County Health Department	338 1st Avenue SW Taylorsville, NC 28681 828-632-9704	7.3	Alexander	37003040400	37003040100 37003040200 37003040300 37003040400 37003040500 37003040600 37025041600	37035011501 37035011502
Cabarrus Health Alliance	280 Concord Pkwy S Suite 210 Concord NC 28027 704-920-1150	1.0	Cabarrus	37025042500	37025041600	37159050901 37159051901 37159051902
Cabarrus Health Alliance	1307 South Cannon Blvd. Kannapolis, NC 28083. 704-920-1000	1.0	Cabarrus	37025040800	37025041600	37159050901 37159051901 37159051902
Catawba County Health Department	3070 11th Ave Drive SE Hickory, NC 28602 828-695-5800	1.0	Catawba	37035011000	37035011501 37035011502 37035011802	37003040600
Gaston County Health Department	991 West Hudson Blvd Gastonia, NC 28052 704-853-5260	1.0	Gaston	37071033301	37071030500 37071030600 37071030700	37035011502
Rowan County Health Department	1811 East Innes Street Salisbury, NC 28146 704-216-8777	4.2	Rowan	37159050201	37159050901 37159051901 37159051902	
Union County Health Department	224 West Roosevelt Blvd Monroe, NC 28110 704-296-4800	1.0	Union	37179020401	37179020700 37179020800 37179020901 37179020902 37179021002	

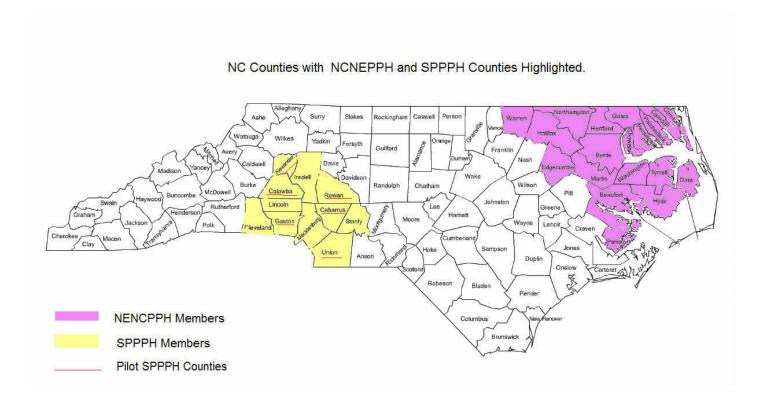
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Pilot Clinic Location Information		<u> </u>		rage 10 01	
NCAFC					
Participant Name	Clinic Address, Phone	RUCA code of clinic	County	State-County- Tract Code of clinic location	USAC Eligible Tracts with Population Served by this Clinic within the same county
	omno Address, i nens	00	County	Cirrio iocation	County
NCAFC Clinics	528 A Lake Concord Road				
Community Free Clinic	Concord NC 28025- (704) 782-0650	1.0	Cabarrus	37025042300	37025041600
Greater Hickory Cooperative	31 First Avenue SE				37035011501
Christian Ministry Health Care	Hickory NC 28602-				37035011501
Center	828-327-0979	1.0	Catawba	37035010900	
Conto	420 N. Salisbury Street	1.0	Catawaa	07000010000	07000071002
Davidson Medical Ministries Clinic, Inc.	Lexington NC 27293- 336-249-6215	4.2	Davidson	37057061400	37057062000
					37059080100
					37059080400
	675 E. Lexington Rd.				37059080500
Storehouse for Jesus Free Medical			<u>.</u>	.=.=	37059080600
Ministries	336-753-8080	7.3	Davie	37059080500	
					37109070100
					37109070200 37109070300
					37109070300 37109070400
					37109070400 37109070500
					37109070300
					37109070700
					37109070800
					37109070900
	105 Dave Warlick Drive				37109071000
	Lincolnton NC 28092-				37109071100
Helping Hands Health Clinic	704-735-7145	4.0	Lincoln	37109070300	
1 3	223 N. Fulton Street				37159050901
	Salisbury NC 28144-				37159051901
Good Shepherd's Clinic	704-636-7200	4.2	Rowan	37159050100	37159051902
	315 G Mocksville Avenue				37159050901
Community Care Clinic of Rowan	Salisbury NC 28144-				37159051901
County	704-636-4523	4.2	Rowan	37159050100	
					37167990100
					37167990200
					37167990300
					37167990400
					37167990500
					37167990600
					37167990700 37167990800
	220 Yadkin Street				37167990800 37167990900
	Albemarle NC 28001-				37167990900 37167991000
Community Care Clinic - Albemarle		4.0	Stanly	37167990400	
Community Caro Chino Tubernanc	10.0011001	7.0	Jiarny	37 107 330 400	37179020700
					37179020700
					37179020901
	415 E. Franklin Street				37179020902
HealthQuest of Union County	Monroe NC 28112-	1.0	Union	37179020600	

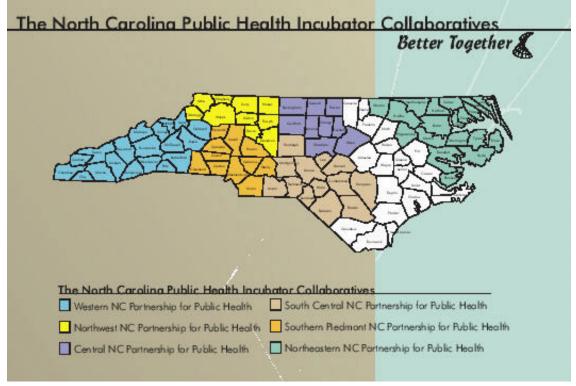
The map below shows the extent of the NCFCA member sites as of 1/07. This would be one of the two dimensions proposed here in which state-wide adoption of the telehealth network would proceed.



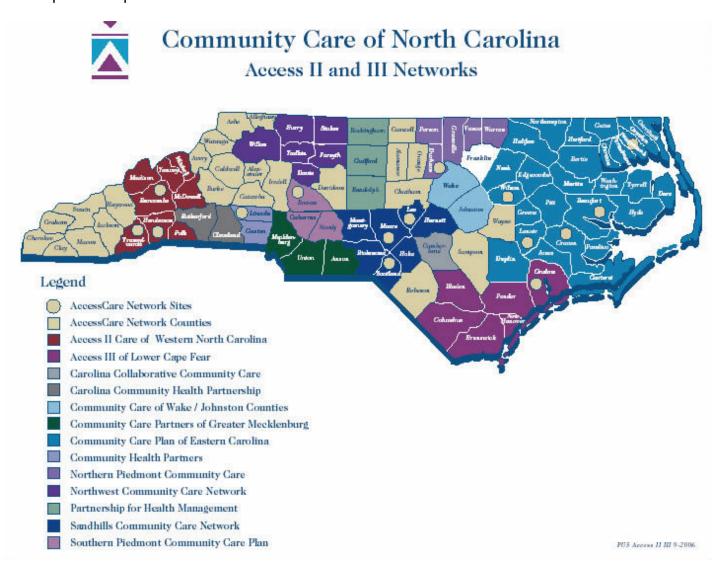
FCC RCH Pilot Grant Proposal –SPPPH/NCFCA –5/7/07 – Page 20 of 38 The map below shows the SPPPH and NENCPPH member counties. The counties with public health clinics committed to the project are underlined in red.



The map below shows the entire set of NC Public Health Incubator Collaborative Regions. The long term network diffusion plan is to pursue adoption of the network on a per region basis.



The Community Care of NC network coverage map is shown below. In combination with the other maps, it illustrates the overlap between CCNC, the SPPPH and NCAFC pilot sites, and the public health partnerships.



G. Previous experience in developing and managing telemedicine programs

The proposal will depend on using the expertise of two types of project partners. Those acting in an advisory/coordinating capacity (listed above) and those vendors/contractors who are selected to aid in the planning, design, and piloting activities. Although more advisors/vendors/contractors may be identified after the project starts, the key current sources of expertise are:

- e-NC This group is primarily focused on bringing broadband access for a variety of purposes across NC. The staff members have background in the telemedicine area. Notably the Executive Director was the original architect of the NC Information Highway and the NC Telemedicine Network in the 1990s. e-NC's ongoing programs support telecenters, e-Communities, local e-Government projects, along with various resources and studies to promote thoughtful use of information technology. e-NC is positioned to leverage its interest and abilities in network diffusion in this proposal.
- **-NCHICA** This group has a long history of piloting and promoting many types of multiparty health information systems. Notable recent project include prototyping a state-wide immunization registry, collaborating on a system that now aggregates near-real time public health surveillance data from most NC hospital EDs, leading a state-wide HIPAA Privacy and Security compliance effort, and participating as one of the initial pilot project partners in the Nationwide Health Information Network. NCHICA will bring clinical, policy and technology experience to the project and will assist by coordinating with other funded FCC projects in the state of NC and nearby states (e.g. SC and VA) to facilitate the exchange of ideas and lessons learned for the purpose of ensuring interoperability of various projects underway in NC and across the United States. NCHICA is participating with the National Governors Association State Alliance for e-Health that will develop supporting policies that will enable the secure exchange of electronic health information among enterprises for health and care purposes. NCHICA will bring these experiences to the project.
- -Kirby Information Management Consulting The president of this consultancy has a long history in NC of developing and operating telehealth programs and other multi-institutional health IT efforts involving public health groups and private health groups. He is positioned as an expert resource to the project.
- -University of NC School of Public Health/ NC Institute of Public Health The NCIPH routinely works with public health groups to develop health information services. Recent information services projects include regional assessments of information service status and opportunities, and GIS-based projects. The NCIPH is the coordinating element for the state's six regional public health collaboratives. As such, we plan for it to be especially helpful in forming a diffusion model for the network.
- **-Telecommunication and other service providers** The various telecommunications service providers in NC (selected ones listed above) have a long history of providing the types of telecommunication access that this project requires including a long history of being supportive of telemedicine efforts in the state. They will bring expertise especially in the "Access" dimension of the project. We also have various health-centric application service providers and marketing groups who have shown an interest in the project. While we are not limiting our selves to those who have shown interest to date, their involvement reassures us that the required expertise can be available when needed.

H. Project management plan outlining the project's leadership and management structure, as well as its work plan, schedule, and budget;

1. Project Management Plan:

The project management process is designed around three key facets of the proposed project: 1) The three dimensions of access, applications, and marketing/training will proceed simultaneously for much of the project with only a few key coordination points. Within each of these three dimensions, many of the processes can logically proceed simultaneously (e.g. surveying of the clinic sites) given adequate resources. 2) There is a strong need to balance the delays inherent in a multi-party advising process with the need to take reasonable risks in each dimension when the advisory function is not producing a timely consensus. 3) There is a strong need to acquire and use competent resources (especially a project management office) to manage the project and to have those resources be firmly directed by the project leaders.

The following management plan is designed to accommodate the above mentioned key features of the proposal:

- 1) <u>Project Leadership:</u> The Cabarrus Health Alliance will be the party legally and fiscally responsible for the project. The CHA will carry out this role in close cooperation with the designated project liaison pair of the NC Association of Free Clinics. Dr. William F. Pilkington, Director of the CHA, will be the chief executive of the project. The CHA and the NCAFC will each appoint two liaisons who will work closely with the Dr. Pilkington and the project management office (described below) to assure timely and thoughtful decisions at the tactical level. Official communication with the FCC on the project will come from Dr. Pilkington or a designee noted in writing.
- 2) PMO: A project management office (PMO) function will be contracted with an appropriate party. The office will need two skilled project managers and a fraction of one administrative resource person. The PMO will be responsible for forming and following and reporting on progress associated with the detailed plans needed to carry out the strategic and tactical plans provided by the project leadership. The PMO will produce tactical budget and task status and progress reports on a monthly basis for project leadership and will produce quarterly strategic-level budget and task status and progress reports that will be finalized by project leadership and shared with the Council (described below) and the FCC (if desired). Any significant adjustments to budget usage and/or project goals and process will be vetted by project leadership with the Council and negotiated with the FCC as needed.
- 3) Advising/Coordination Council: This group of organizations (with initial members noted above) will appoint two persons each to be the continuing forces on the project. As key service/product providers are contracted for major project elements these service/product providers will add non-voting members to the Council. The Council's chief purposes are to: 1) advise the project leadership on key decisions 2) coordinate activities of the project with the parties represented on the Council and 3) participate in reviews of the project and aid in solving problems and pursuing opportunities where appropriate. Item 2 above will be a contracted function for organizations on the council that have a significant amount of time involved in coordination. One key coordination element will be the coordination of other FCC funded projects in North Carolina; these elements will be led by NCHICA and e-NC as Council members.

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We have made use of pairs of people to carry out roles described above in many cases. The intent is that each person in each pair will generally be able to carry out the needed role. This arrangement will assure that meetings with a quorum can happen quickly, that work that can occur simultaneously will not be unduly serialized due to lack of resource, and will assure that the risk of loss of staff/representatives to the project will not significantly raise the risk of serious project delays.

2. Work Plan

The work plan is designed around the same three facets of the project noted under the project leadership heading above (i.e. access, applications, and marketing/training) a coordination track is added to assure the smooth interoperation of the three other tracks. The tables below therefore show four types of activities for each month: A) coordinative activities B) Access related activities, C) Application-related activities and D) Marketing/Training-related activities.

There are many unknowns that may affect work plan and budget as the project progresses. We have prepared to accommodate these unknowns with the following features to the work plan:

- We have built in refinement and feedback steps at each stage of the work to assure that we catch and respond to emerging opportunities and challenges.
- We involve only a portion of the pilot sites at first in a given activity and then involve the remaining ones later. This allows us the learn from our experiences with a small group of sites before approaching the remaining sites.
- We can adjust the "sizes" of various tasks to fit a budget that must be adjusted based on experience during the project.

The tables below show the major tasks/milestones and calendar. There is one row for each month of the project. .

Note that in the MSWord version of this document the tables are embedded Excel objects that reviewers may double click on to manipulate as Excel spreadsheets if desired. In other document forms, the Tables are available upon request.

ICC KC		-SPPPH/NCFCA -5///C	0/ – Page 23	3 01 36
	NC FCC Rural Health Care			
	Pilot Project -			
	Workplan and Resource Chart -			
	•			
	5/4/07			
	Cross-track Coordination and	"Access" Track Tasks	"Applications" Track Tasks	"Marketing/Training" Track
		Access Track rasks	Applications mack rasks	
	other Tasks			Tasks
Relative				
month				
from				
phase				
start				
	Phase 1 - Planning and Design	Phase 1 - Planning and Design	Phase 1 - Planning and Design	Phase 1 - Planning and Design
		THOSE TETALIHING AND DESIGN	THOSE I - FIGHTHING AND DESIGN	THOSE I - FIGHHING AND DESIGN
	Establish project management			
	functions;			
	Create PMO RFP and Contract			
	with PMO			
	Establish status/progress			
	. •			
1	measures;			
	Create RFPs for contracted			
	services (for access, application,			
	and marketing tracks)			
	,			
	Create project communication			
	plan;			
2				
	Obtain contractors: refine	Carry out and document external	Carry out and document	Carry out and document
	tactical plan based on responses.	scan for existing	external scan for existing	external scan for existing
		business/technical models that	applications and associated	marketing data relevant to the
	Monthly call with PMO and	may be adapted for our	technical/business models	network goals. (Intended overlap
	Council on status, progress, and	purposes.		with scans being done by Access
		paipood.		and Applications track.
	potentials plan changes.			ани Аррноанонь наск.
	0 .4			
	Synthesize ideas and			
	recommendations from the three			
	tracks.			
3				
	T.			<u>l</u>

Relative month from phase start	Cross-track Coordination and other Tasks	"Access" Track Tasks	"Applications" Track Tasks	"Marketing/Training" Track Tasks
	Phase 1 - Planning and Design Create quarterly project report of progress and staus; recommendations for adjustments included. Meet with Leadership. PMO, Council (combined face-to-face and web-based meeting) on project status/progress/changes. Synthesize ideas and recommendations	Phase 1 - Planning and Design Contractors develop 3-5 sustainable draft business model/technical model proposal for rural broadband services. Including diffusion model, proof of concept needs, and piloting plan.	Phase 1 - Planning and Design Contractors develop 10-15 sustainable draft business model/technical model proposal for applications including diffusion model, proof of concept needs, and piloting plan.	Phase 1 - Planning and Design Contractors develop draft marketing models with 3-5 proposals for network (NCTN) marketing including approach to public, care providers, medical researchers, health plans. Analysis of options. Include diffusion model options.
4				
5		Review/refine/rank models by project leadership, PMO and Council. Refine tactical plan based on result. Choose which aspects of which models to develop further. (Next steps in this track apply only to the ones selected)	Review/refine/rank models by project leadership, PMO and Council. Refine tactical plan based on result. Choose which aspects of which models to develop further. (Next steps in this track apply only to the ones selected)	Review/refine/rank models by project leadership, PMO and Council. Refine tactical plan based on result. Choose which aspects of which models to develop further. (Next steps in this track apply only to the ones selected)
6	Monthly call with PMO and Council on status, progress, and potentials plan changes. Synthesize ideas and recommendations from the three tracks.	Carry out any field work and proof of concept work needed to decide which models should be carried on to pilot mode.	Carry out any field work and proof of concept work needed to decide which models should be carried on to pilot mode.	Carry out any field work and proof of concept work needed to decide which models should be carried on to pilot mode.

Relative	Cross-track Coordination and	"Access" Track Tasks	"Applications" Track Tasks	"Marketing/Training" Track
month from phase start	other Tasks			Tasks
7	Create quarterly project report of progress and staus; recommendations for adjustments included. Meet with Leadership. PMO,	Phase 1 - Planning and Design Draft analysis of selected models with recommendations about which ones would be good candidates for piloting. Include analysis of fit with other known NC projects (especially FCC projects)	Draft analysis of selected models with recommendations about which ones would be good candidates for piloting. Include analysis of fit with other known	Phase 1 - Planning and Design Draft analysis of selected models with recommendations about which ones would be good candidates for piloting. Include analysis of fit with other known NC projects (especially FCC projects)
8	Monthly call with PMO and Council on status, progress, and potentials plan changes. Synthesize ideas and recommendations from the three tracks.	Review/refinement of analysis/recommendations by Project leadership/PMO/Council.	Review/refinement of analysis/recommendations by Project leadership/PMO/Council.	Review/refinement of analysis/recommendations by Project leadership/PMO/Council.
	Monthly call with PMO and	Chose which models to pilot and in which areas. Create and refine piloting plan as prelude to second phase application.	Chose which models to pilot and in which areas. Create and refine piloting plan as prelude to second phase application.	Chose which models to pilot and in which areas. Create and refine piloting plan as prelude to second phase application.

Relative	Cross-track Coordination and	"Access" Track Tasks	"Applications" Track Tasks	"Marketing/Training" Track
month from phase start	other Tasks			Tasks
	<u> </u>	Phase 1 - Planning and Design	· · · · · · · · · · · · · · · · · · ·	Phase 1 - Planning and Design
	Create quarterly project report of progress and staus; recommendations for adjustments included.	Obtain advice from Council on piloting draft plan. Refine piloting plan.	Obtain advice from Council on piloting draft plan. Refine piloting plan.	Obtain advice from Council on piloting draft plan. Refine piloting plan.
	Meet with Leadership. PMO, Council (combined face-to-face and web-based meeting) on project status/progress/changes.	Submit/update year 2 plan for FCC funding; Including continuity plan for post-year 2 sustainable operations.	Submit/update year 2 plan for FCC funding; Including continuity plan for post-year 2 sustainable operations.	Submit/update year 2 plan for FCC funding; Including continuity plan for post-year 2 sustainable operations.
	Synthesize ideas and recommendations			
10				
	Monthly call with PMO and Council on status, progress, and potentials plan changes.	Prepare for year 2 pilot phase based on assumed year 2 funding	Prepare for year 2 pilot phase based on assumed year 2 funding	Prepare for year 2 pilot phase based on assumed year 2 funding
11	Synthesize ideas and recommendations from the three tracks.			
	Monthly call with PMO and Council on status, progress, and potentials plan changes.	Prepare for year 2 pilot phase based on assumed year 2 funding	Prepare for year 2 pilot phase based on assumed year 2 funding	Prepare for year 2 pilot phase based on assumed year 2 funding
12	Synthesize ideas and recommendations from the three tracks.			

Relative month	Cross-track Coordination and other Tasks	"Access" Track Tasks	"Applications" Track Tasks	"Marketing/Training" Track Tasks
from	other rasks			Tasks
phase				
start				
	Phase 2 - Pilot and Evaluation Meet with Leadership. PMO, Council (combined face-to-face and web-based meeting) on project status/progress/changes.	Phase 2 - Pilot and Evaluation Begin execution of pilot plan. (primarily deploy technical facilities) in about 1/3 of selected locales	Phase 2 - Pilot and Evaluation Begin execution of pilot plan. (primarily deploy technical facilities) in about 1/3 of selected locales	Phase 2 - Pilot and Evaluation Begin execution of pilot plan. (primarily deploy technical facilities) in about 1/3 of selected locales
	Synthesize ideas and recommendations from the three tracks.	Prepare evaluation tool to do 360 degree assessment of access mechanism (especially for users, field techs, central techs, remote support staff	degree assessment of application	•
1				
2	Monthly call with PMO and Council on status, progress, and potentials plan changes. Synthesize ideas and recommendations from the three tracks.	Continue execution of pilot plan. (primarily deploy technical facilities in selected locales). Obtain first wave of feedback using eval tool; Adjust pilot plan where feasible in response.	Continue execution of pilot plan. (primarily deploy application facilities in selected locales). Obtain first wave of feedback using eval tool; Adjust pilot plan where feasible in response.	Continue execution of pilot plan. Obtain first wave of feedback using eval tool; Adjust pilot plan where feasible in response.
	Monthly call with PMO and Council on status, progress, and potentials plan changes. Synthesize ideas and recommendations from the three tracks.	Continue execution of pilot plan. (primarily deploy technical facilities in selected locales). Obtain second wave of feedback using eval tool; Adjust pilot plan where feasible in response.	Continue execution of pilot plan. (primarily deploy technical facilities in selected locales). Obtain second wave of feedback using eval tool; Adjust pilot plan where feasible in response.	Continue execution of pilot plan. Obtain second wave of feedback using eval tool; Adjust pilot plan where feasible in response.
3				

Relative	Cross-track Coordination and	"Access" Track Tasks	"Applications" Track Tasks	"Marketing/Training" Track
month	other Tasks			Tasks
from				
phase				
start				
	Phase 2 - Pilot and Evaluation	Phase 2 - Pilot and Evaluation	Phase 2 - Pilot and Evaluation	Phase 2 - Pilot and Evaluation
	Meet with Leadership. PMO,	Continue execution of pilot plan.	Continue execution of pilot plan.	Continue execution of pilot plan.
	Council (combined face-to-face	(primarily deploy technical	(primarily deployapplication	
	O /	facilities in selected locales).	facilities in selected locales).	Obtain third wave of feedback
	project status/progress/changes.			using eval tool; Adjust pilot plan
	Cunthaniza idaga and	Obtain third wave of feedback	Obtain third wave of feedback	where feasible in response.
	Synthesize ideas and recommendations from the three	using eval tool; Adjust pilot plan where feasible in response.	using eval tool; Adjust pilot plan where feasible in response.	
	tracks.	where reasible in response.	where reasible in response.	
	llacks.			
4				
	Monthly call with PMO and	Begin execution of pilot plan.	Begin execution of pilot plan.	Begin execution of pilot plan. in
	Council on status, progress, and	(primarily deploy technical	(primarily deploy application	the remaining 2/3 of selected
	potentials plan changes.	facilities) in the remaining 2/3 of	facilities) in the remaining 2/3 of	pilot sites.
		selected pilot sites.	selected pilot sites.	
	Synthesize ideas and			
	recommendations from the three			
	tracks.			
5				
	Monthly call with PMO and	Continue execution of pilot plan.	Continue execution of pilot plan.	Continue execution of pilot plan.
	Council on status, progress, and	(primarily deploy technical	(primarily deploy application	
	potentials plan changes.	facilities in selected locales).	facilities in selected locales).	Obtain next wave of feedback
				from prior and new users using
	Synthesize ideas and	Obtain next wave of feedback	Obtain next wave of feedback	eval tool; Adjust pilot plan where
	recommendations from the three	from prior and new users using	from prior and new users using	feasible in response.
	tracks.	eval tool; Adjust pilot plan where	eval tool; Adjust pilot plan where	
		feasible in response.	feasible in response.	
6				

Relative month from phase start	Cross-track Coordination and other Tasks	"Access" Track Tasks	"Applications" Track Tasks	"Marketing/Training" Track Tasks
	Phase 2 - Pilot and Evaluation Meet with Leadership. PMO, Council (combined face-to-face and web-based meeting) on project status/progress/changes. Synthesize ideas and recommendations from the three tracks.	Phase 2 - Pilot and Evaluation Continue execution of pilot plan. (primarily deploy technical facilities in selected locales). Obtain next wave of feedback from prior and new users using eval tool; Adjust pilot plan where feasible in response.	Phase 2 - Pilot and Evaluation Continue execution of pilot plan. (primarily deploy application facilities in selected locales). Obtain next wave of feedback from prior and new users using eval tool; Adjust pilot plan where feasible in response.	Phase 2 - Pilot and Evaluation Continue execution of pilot plan. Obtain next wave of feedback from prior and new users using eval tool; Adjust pilot plan where feasible in response.
7	Monthly call with PMO and Council on status, progress, and potentials plan changes. Synthesize ideas and recommendations from the three tracks.	Continue execution of pilot plan. (primarily deploy technical facilities in selected locales). Obtain next wave of feedback from prior and new users using eval tool; Adjust pilot plan where feasible in response.	Continue execution of pilot plan. (primarily deploy application facilities in selected locales). Obtain next wave of feedback from prior and new users using eval tool; Adjust pilot plan where feasible in response.	Continue execution of pilot plan. Obtain next wave of feedback from prior and new users using eval tool; Adjust pilot plan where feasible in response.
8	Monthly call with PMO and Council on status, progress, and potentials plan changes. Synthesize ideas and recommendations from the three tracks.	Draft comprehensive report on pilot access experience with recommendations for diffusion, and FCC policy change options.	Draft comprehensive report on pilot application experience with recommendations for diffusion, and FCC policy change options.	Draft comprehensive marketing report on pilot experience with recommendations for diffusion, and FCC policy change options.

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Relative month from phase start	Cross-track Coordination and other Tasks	"Access" Track Tasks	"Applications" Track Tasks	"Marketing/Training" Track Tasks
otart	Phase 2 - Pilot and Evaluation	Phase 2 - Pilot and Evaluation	Phase 2 - Pilot and Evaluation	Phase 2 - Pilot and Evaluation
	Meet with Leadership. PMO, Council (combined face-to-face and web-based meeting) on project status/progress/changes.	Review of draft report by Leadership, PMO, and Council with recommendations for diffusion model adjustments.	Review of draft report by Leadership, PMO, and Council with recommendations for diffusion model adjustments.	Review of draft plan by Leadership, PMO, and Council with recommendations for diffusion model adjustments.
	Synthesize ideas and recommendations from the three tracks.	Create post-year 2 plan for sustainable operations.	Create post-year 2 plan for sustainable operations.	Create post-year 2 plan for sustainable operations.
	Create comprehensive post-year 2 plan for sustainable operations.			
10	Monthly call with PMO and Council on status, progress, and potentials plan changes. Synthesize ideas and recommendations from the three tracks.	Finalize pilot plan with recommendations for FCC poilcy option changes and diffusion model refinements.	Finalize pilot plan with recommendations for FCC poilcy option changes and diffusion model refinements.	Finalize pilot plan with recommendations for FCC poilcy option changes and diffusion model refinements.
11	Draft comprehensive report with FCC policy options recommendatiosn and diffusion plan.			
	Monthly call with PMO and	Provide comments on draft comprehensive report.	Provide comments on draft comprehensive report.	Provide comments on draft comprehensive report.
	Synthesize ideas and recommendations from the three tracks.			
	Finalize comprehensive report with FCC policy options recommendations and diffusion plan.			
12	 Finalize and begin diffusion			

3. Budget

The budget is based on the work plan. There are many unknowns that may affect work plan and budget as the project progresses. We have prepared to accommodate these unknowns with the following features to the work plan:

- We have built in refinement and feedback steps at each stage of the work to assure that we catch and respond to emerging opportunities and challenges.
- We involve only a portion of the pilot sites at first and then the remaining ones later for each activity. This allows us the learn from our experiences with a small group of sites before approaching the remaining sites.
- We can adjust the "sizes" of various tasks to fit a budget that must be adjusted based on experience during the project.

The budget summary tables below are the product of a detailed analysis in which we reviewed each work plan task and estimated resource needs from each category of resource. Each phase's summary shows the basic estimates of labor loads and cost of labor, travel needs, and other items. Note that we've included A) resources that are part of FCC's 85% funding, B) resources that are part of the 15% funding, and C) resources that are used in the project but are not eligible for FCC funding. These different types of resources are distinguished in the tables below so that one can see which resources are coming from each category.

In phase 2, the bulk of the budget is in the "Other" category. These "Other" costs in Phase 2 are largely the costs of telecommunications equipment to carry out pilot tests of telecommunications access models in rural areas.

Note that in the MSWord version of this document the tables are embedded Excel objects that reviewers may double click on to manipulate as Excel spreadsheets containing monthly detail and with the associated workplan items, if desired. In other document forms, the tables are available upon request.

FCC RCH Pilot Grant Proposal –SPPPH/NCFCA –5/7/07 – Page 34 of 38 Activities paid by SPPPH (likely via CommonGround (towards 15%) Activities by NC likely via BCBS (towards 15%) TOTAL Clinic Staff (no charge) Direct Other Direct Other Z Service/product provider (contracted) State-wide Coordinator (e.g. e-NC/NCHICA (contracted svcs) Travel Travel Direct Cost Direct Project Leadership NCPPH(contracted sycs) Descriptio Cost Descripti Cost PMO (contracted) Amounts n **Amount** on s (\$) တင AFC grant Phase 1 Totals Phase 1 totals \$31,200 \$20,800 125 466.4 300 \$44,200 36 176 Cost per 8-hr day of labor 1200 800 1600 800 800 400 Phase 1 totals (\$) \$100,000 \$559,680 \$480,000 \$28,800 \$140,800 \$19,200 \$31,200 \$20,800 \$44,200 \$1,424,681 Phase 1 totals for FCC funds \$475,728 \$408,000 \$24,480 \$0 \$0 \$0 \$37,570 \$1 \$1,065,459 \$119,680 Phase 1 totals for 15% matching funds \$0 \$83,952 \$72,000 \$4,320 \$21,120 \$31,200 \$20,800 \$6,630 \$240,022 FCC % 85% 0% 85% 85% 85% 85% 0% 0% 85% 0% Grantee % (towards 15%) 0% 0% 0% 0% 0% 0% 0% 100% 0% 100% Contractor %(towards 15%) 15% 0% 15% 15% 0% 0% 15% 15% 15% 0% Other % (not towards 15%) 0% 0% 0% 0% 100% 0% 0% 0% 100% Total % of costs 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% Actual % of costs that are eligible for FCC 85% payment, paid by FCC. 82% FCC RCH Pilot Grant Proposal –SPPPH/NCFCA –5/7/07 – Page 35 of 38 A ctivities paid by SPPPH (likely via Com mon Ground (towards 15%) A ctivities likely via (towards 1 TOTAL Direct Other Other Direct State-wide Coordina (e.g. e-NC/NCHI (contracted sv Clinic Staff (no charge) Direct Cost Direct Travel Travel Z ш Cost Descriptio Cost Descripti Z CP Amounts AmountsIn PPH (contracted sycs) 5 B B ervice/producter (contracted) ్ల ౧ ≺ œΖ တင **س** > F C in ator 3 H IC A s vcs) **Phase 2 Totals** Phase 1 totals 48 \$28,800 \$19,200 \$50,400 \$3,015,000 120 508.8 1260 192 208 \$0 Cost per 8-hr day of labor 800 1200 1600 800 800 400 Phase 1 totals (\$) \$0 \$610,560 \$2,016,000 \$38,400 \$153,600 \$83,200 \$28,800 \$19,200 \$3,015,000 \$6,060,760 \$96,000 Phase 1 totals for FCC funds \$0 \$2,562,750 \$4,958,526 \$518,976 \$1,713,600 \$32,640 \$130,560 \$0 \$0 \$0 \$0 \$0 Phase 1 totals for 15% matching funds \$0 \$302,400 \$28,800 \$19,200 \$452,250 \$923,034 \$91,584 \$5,760 \$23,040 \$0 \$0 FCC % 85% 0% 85% 0% 85% 85% 0% 85% 0% Grantee % (towards 15%) 0% 0% 0% 0% 0% 0% 0% 0% 100% 100% Contractor % (towards 15%) 15% 15% 15% 15% 0% 0% 15% 15% 0% 0% Other % (not towards 15%) 0% 0% 100% 0% 0% 0% 0% 100% 0% 0% Total % of costs 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% Actual % of costs that are eligible for FCC 85% payment, paid by FCC. 84%

I. How the telemedicine program will be coordinated throughout the state or region;

Our telehealth network adoption model is focused on network expansion by region using the public health incubator regions. The adoption model for the NC Association of Free Clinics is similar in that they plan to start with selected clinics and then expand to other regions as resources permit. The e-NC is well-positioned, given resources, to use its skills and interests in expanding the reach of the network through careful planning of the diffusion model.

The Advisory/Coordination Council is positioned in the project as a key force in assuring that the right parties are involved in the best way at the optimal time. Coordination with other sectors of health care in NC not directly participating in this project and other funded FCC pilot projects in NC and surrounding states will be additionally assisted by a collaboration facilitated by NCHICA and e-NC.

In the operational phase of the telehealth network we plan for the regional boards to manage the internal network and work as needed across region boundaries. The NCAFC will be the coordinating body for their member clinics. Other features of the governance model will emerge as part of this project's work.

As a formal part of our project we will seek engagement and coordination with additional programs and parties who may be able to provide benefits to the health care providers and the public by use of the NC TeleHealth Network (NCTN). Notably, we will seek to have the NCTN used to provide the data needed to support traditional teleconsulting programs (e.g. tele-radiology, teledermatology) and traditional tele-therapy programs (e.g. home health, mental health).

J. Extent that the network can be self-sustaining once established.

We plan for the model developed here to be sustainable with a business model that partially depends on USAC funding for rural areas and otherwise depends on the generation of value for the public, healthcare providers, medical researchers, employers, health plans and population health planning enterprises.

We intend to pursue a model that will bring together a stable source of funding by combining value exchanges with many parties (e.g. medical researchers, health product suppliers, employers, public and private health plans, care providers, private philanthropy, state and federal government, and the public). As opposed to a model that would depend on a single source of funds, we expect that this multi-party approach will provide a more stable funding vehicle, infuse greater value into the health arena, motivate more thoughtful continuing involvement of the key parties in the network's operation and development, and create circumstances where no one party will have undue influence on this community resource. Notably, our marketing studies will explore options that support this outcome.

Commitment and Support Letters

The letters below describe various forms of commitment and support for this proposal from various state and national organizations. We believe that this group is a critical mass of support that will aid this project's success and will aid in reaching the long term goals of this line of work.

Alexander County Health Department 338 1st Avenue, SW Taylorsville, NC 28681 828-632-9704

Dr. Phred Pilkington Director of Public Health, Cabarrus Health Alliance 1307 S Cannon Boulevard Kannapolis, NC, 28083

Dear Dr. Pilkington:

We are pleased to offer our support for your proposal to pilot a regional health network to be carried out as a grantee under the FCC's Rural Health Care Pilot Program.

We understand that the proposal focuses on planning in year 1 and piloting in year 2 of the following elements:

- Sustainable technical and business models to support broadband connections between health providers and the public that are viable for rural areas of North Carolina.
- Sustainable technical and business models for health-improving applications that depend on broadband connections between providers and their patients- especially in rural areas of North Carolina. We understand that planning and selection of these applications is an activity for year 1 and piloting of them is a year 2 activity.
- Marketing and training programs that will assure appropriate adoption of the accessible applications by healthcare providers and their patients— especially rural non-profit and public providers.

We understand that this proposal is consistent with and supportive of the other work being done by the Southern Piedmont Partnership for Public Health in the area of connecting public health with the public and other public health partners.

If the proposal as described is selected and funded, we agree to:

- Participate in developing the health-improving application definitions along with their business/process models.
- Participate in any initial marketing survey needed in year 1 and with marketing/training efforts in year two.

Yours truly,

Leeanne Whisnant, Health Director Alexander County Health Department



CATAWBA COUNTY

3070 11th Av Dr SE • Hickory, North Carolina 28602-8336 • Telephone: 828-695-5775 • Fax: 828-695-4410

Public Health Department

May 3, 2007

Dr. Phred Pilkington Director of Public Health, Cabarrus Health Alliance 1307 S Cannon Boulevard Kannapolis, NC, 28083

Dear Dr. Pilkington:

We are pleased to offer our support for your proposal to pilot a regional health network to be carried out as a grantee under the FCC's Rural Health Care Pilot Program. We understand that the proposal focuses on planning in the first year and piloting in the second year of the following elements:

- Sustainable technical and business models to support broadband connections between health providers and the public that are viable for rural areas of North Carolina.
- Sustainable technical and business models for health-improving applications that depend on broadband connections between providers and their patients- especially in rural areas of North Carolina. We understand that planning and selection of these applications is an activity for the first year and piloting of them is a second year activity.
- Marketing and training programs that will assure appropriate adoption of the accessible applications by healthcare providers and their patients— especially rural non-profit and public providers.
- We understand that this proposal is consistent with and supportive of the other work being done by the Southern Piedmont Partnership for Public Health in the area of connecting public health with the public and other public health partners.

If the proposal as described is selected and funded, we agree to:

1. Participate in developing the health-improving application definitions along with their business/process models.

2. Participate in any initial marketing survey needed in the first year and with marketing/training efforts in year two.

Sincerely,

Douglas W. Urland, Health Director Catawba County Public Health

DWU: mjk

"Keeping the Spirit Alive Since 1842!" $_{\odot}$





Connecting North Carolina to a Better Future

Oppie N. Jordan Chair

Dr. Phred Pilkington Director of Public Health, Cabarrus Health Alliance 1307 South Cannon Boulevard Kannapolis, NC 28083

May 7, 2007

George Bakolia

Dear Dr. Pilkington:

John Bardo Herb Crenshaw Jim Fain Craig Fowler

Billy Ray Hall

Jon R. Hamm

Lewis Hoggard

Joseph Hurdt

Lee Mandell Bo McNeill

Rhonda Raney

Rebecca Troutman

Jane Smith Patterson Executive Director

www.e-nc.org 1-866-NCRURAL On behalf of the e-NC Authority we are pleased to write in support of a proposal that is being submitted by the Southern Piedmont Partnership for Public Health and the North Carolina Association of Free Clinics to the Federal Communications Commission's Rural Health Care Support Mechanism, WC Docket No. 02-60. The e-NC Authority is an award winning, nationally recognized state agency that was established in 2001 to improve the awareness, access and ability of North Carolinians to use the Internet and the resources it can deliver. We appreciate the opportunity created by the FCC's Telehealth RFP to join with your organization and others to make telehealth a reality for more of our state's rural citizens.

North Carolina is a large state characterized by high degrees of diversity in its geography, in its population and in their access to healthcare, connectivity and other technology-based resources. The usual challenges that accompany the uptake of new technologies and operations are compounded in the 85 of North Carolina's 100 counties and over fifty percent of its population that are designated "rural". Significant technical, economic, cultural and educational barriers exist to enabling the delivery of critical telehealth services and webbased resources in rural regions of the state. This complex web of challenges points to the need for creative, even experimental approaches to resolving the rural telehealth divide that exists in much of North Carolina.

Extensive discussions with many of the principals of our rural health care and connectivity providers have led us to join with the North Carolina Health Information and Communications Alliance (NCHICA) in proposing a collaborative effort to coordinate telehealth pilot projects across the state in an effort to best leverage our resources and those of the FCC. We believe that coordinated and facilitated information exchange will contribute strongly towards developing and testing successful new policies and models with the potential for replication throughout rural America. Specifically, a number of promising region-based efforts are being discussed across our state, including several of which may be submitted to the FCC for consideration. Over-layering these efforts with the proposed structured approach to information and technology exchange will create an opportunity to leverage any investment made in the individual projects and to support the diffusion of lessons learned, emerging best practices and innovative applications developed.

The e-NC Authority and NCHICA want to send a strong message to the FCC that NC has the ability to coordinate across regions to provide a secure, interoperable functionality in support of FCC pilot projects so that lessons learned can be shared and that the individual efforts are strengthened. Both the e-NC Authority and NCHICA have significant experience leading successful statewide multi-partner collaborative efforts related to connectivity. e-NC's efforts

N.C. Rural Economic Development Center, Inc.

4021 Carya Drive Raleigh, NC 27610 (919) 250-4314 FAX (919) 250-4322 Oppie N. Jordan Chair

George Bakolia
John Bardo
Herb Crenshaw
Jim Fain
Craig Fowler

Billy Ray Hall Jon R. Hamm Lewis Hoggard

Joseph Hurdt

Lee Mandell Bo McNeill

Rhonda Raney

Rebecca Troutman

Jane Smith Patterson Executive Director

www.e-nc.org 1-866-NCRURAL

N.C. Rural Economic Development Center, Inc. 4021 Carya Drive Raleigh, NC 27610 (919) 250-4314 FAX (919) 250-4322 have forged novel partnerships between public, private and non-profit organizations to move broadband access in rural areas from 20% in 2001 to over 78% today. e-NC and NCHICA are jointly committed to applying the considerable technical expertise, management and organizational skills and our rich statewide networks of public and private partners to ensure the success of each of the individual projects being submitted to the FCC to improve heath care in rural North Carolina. Four e-NC staff that will work with proposed telehealth projects will bring more than 110 years of relevant experience to the efforts. Further, we are committed to working across these pilot projects to develop a statewide virtual collaboratory, a network of networks, that will support an integrated, information-rich statewide system of best practices.

Functionality and deliverables that will be brought by e-NC and NCHICA to the efforts specified in the North Carolina-based proposals being submitted to the FCC include the following:

Creation: Contribution to the Planning Process:

- Assist individual projects with technical support for connectivity planning, vendor evaluation, and implementation
 For example, e-NC staff works with partners to identify connectivity options and alternative approaches, develop project specifications and budgets and develop RFP, and to advise during vendor meetings and quote evaluation.
- Work with project teams to plan for applying proven models for community outreach and education to increase awareness and use of telehealth services that are being created

Coordination and Evaluation

- Create a forum for collaboration across various telehealth projects across North Carolina to enable rapid transfer of emerging standards and best practices
- Host and facilitate regular progress meetings among various telehealth project groups
- Assist with development of rigorous evaluation metrics and processes for individual projects and for the status of telehealth in the state overall
- Work with FCC to ensure distillation of lessons learned in highest-value format

Communication

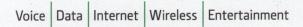
- Attend regional and national meetings to help project teams present models being developed to broader audiences
- Develop and maintain electronic information exchange structures to support what is envisioned as a NC Telehealth Virtual Laboratory
- Work with state, regional and FCC leaders to identify appropriate standards and policy issues emerging from the collective of projects funded in North Carolina.

We have reviewed the project plan developed by the Southern Piedmont Partnership for Public Health and the North Carolina Association of Free Clinics and the strength of the team that will implement it. We strongly endorse it for funding consideration by the FCC. We further commit our time, expertise and resources to ensuring that the project's success will be extend throughout North Carolina, and beyond.

Sincerely,

Jane Smith Patterson

Jane Snethe Patterson





Embarq Corporation
Mailstop: NCWKFR0233
14111 Capital Boulevard
Wake Forest, NC 27587-5900
EMBARQ.com

May 1, 2007

Dr. Phred Pilkington Director of Public Health Cabarrus Health Alliance 1307 S Cannon Boulevard Kannapolis, NC 28083

Dear Dr. Pilkington:

We are pleased to offer our support for your proposal to pilot a regional health network to be carried out as a grantee under the FCC's Rural Health Care Pilot Program.

We understand that the proposal focuses on planning in year 1 and piloting in year 2 of the following elements:

- Sustainable technical and business models to support broadband connections between health providers and the public that are viable for rural areas of North Carolina.
- Sustainable technical and business models for health-improving applications that depend on broadband connections between providers and their patients- especially in rural areas of North Carolina. We understand that planning and selection of these applications is an activity for year 1 and piloting of them is a year 2 activity.
- Marketing and training programs that will assure appropriate adoption of the accessible applications by healthcare providers and their patients— especially rural non-profit and public providers.

We understand that in the case the project is selected and funded that we would be a potential applicant to vend products and/or services in support of the proposal's goals. We understand that the grantor (the FCC) is providing 85% of the costs involved in these products and services and that we are willing to provide the other 15% for service/product costs that we provide.

By way of this letter we are notifying you that, based on our current understanding of the project, we would have an interest in responding to an RFP created to seek services/products that are in our line of business.

Sincerely,

C. Steve Parrott

C. Steve Parrott

STATE EXECUTIVE-NC/SC Voice: (919) 554-7039

Fax: (919) 554-7910 steve.parrott@embarq.com



Director

Gaston County Health Department

991 West Hudson Boulevard • Gastonia, North Carolina 28052-6430 Phone (704) 853-5000 • www.gastonpublichealth.org

May 1, 2007

Dr. Phred Pilkington Director of Public Health, Cabarrus Health Alliance 1307 S Cannon Boulevard Kannapolis, NC 28083

Dear Dr. Pilkington:

The Gaston County Health Department is pleased to offer its support for your application, *A Proposal for a TeleHealth Network*, being submitted to the FCC Rural Health Care Pilot Program.

We understand the program would develop plans, in the first year, and pilot the completed plans, in the second year, for:

- Sustainable technical and business models to support broadband connections between health providers and the public, in rural areas of North Carolina.
- Sustainable technical and business models for health-improving applications that depend on broadband connections between providers and their patients – especially in rural areas of North Carolina.
- Marketing and training programs that will assure appropriate adoption of these applications by healthcare providers and their patients – especially rural non-profit and public providers.

We understand this proposal is consistent with and supportive of other work of the Southern Piedmont Partnership for Public Health in linking the public and public health partners with public health services.

If the proposal is funded, we agree to: (1) help develop the health-improving application definitions and their business/process models; and, (2) participate in an initial marketing survey (year one) and with marketing/training activities (year two). To this end, we are most interested in helping establish an online appointment scheduling system for our patients.

Sincerely yours,

Colleen Bridger, MPH

Gaston County Health Director





Internet2
Office of the President & CEO
1000 Oakbrook Drive, Suite 300
Ann Arbor, MI 48104
(734) 913-4250
(734) 913-4255 (fax)
www.internet2.edu

May 1, 2007

W. Holt Anderson
Executive Director
North Carolina Healthcare Information and
Communications Alliance, Inc. (NCHICA)
3200 Chapel Hill/Nelson Blvd.
Cape Fear Building, Suite 200
P.O. Box 13048
Research Triangle Park, NC 27709

Dear Mr. Anderson:

On behalf of Internet2, I am pleased to write in support of proposals that the North Carolina Healthcare Information and Communications Alliance will be facilitating in response to the Federal Communication Commission's Rural Health Care Support Mechanism, WE Docket No. 02-60.

We understand that your organization will serve as a convening body to ensure that each proposal is able to coordinate with others, and to help create a comprehensive, standards-based framework to enhance interoperability within the state, between North Carolina and adjacent states, and eventually with the emerging Nationwide Health Information Network as a "network of networks." We are confident that these efforts and your organization's facilitative efforts will contribute to the improvement of healthcare statewide by accelerating the adoption of information technology to improve the lives of citizens, that the use of Internet2's high bandwidth network will provide access to unmatched content and support, and that the medical health care record-keeping will be greatly improved.

The proposal will utilize the new Internet2 Network and the regional networks to expand the telehealth infrastructure and provide high speed connections to all participants. By incorporating Internet2's middleware, security, and performance measurement tools, it also will provide secure exchange of medical records, permit remote access to expert diagnosis and treatment, increase cost-efficiencies by reducing costs associated with travel, and enhance training and research collaboration with secure multi-site videoconferencing. The use of Internet2's network not only will provide an effective, secure, and system for statewide and national telehealth and telemedicine, but also will ensure that training and other

integrated resources will be incorporated to optimize the network's utility. In doing so, the regional network that will be created will facilitate the exchange of reliable data, and digital image, voice, and video transmissions with quality to enhance real-time clinical consultation.

Internet2 is the foremost U.S. advanced networking consortium. Led by the research and education community since 1996, Internet2 promotes the missions of its members by providing both leading-edge network capabilities and unique partnership opportunities that together facilitate the development, deployment and use of revolutionary Internet technologies. The Internet2 Network and its member community innovations in middleware, security, educational networking, and partnerships with premier federal agencies such as NIH are uniquely positioned to deliver high performance, flexible, low-cost connectivity in support of healthcare needs on a sustained basis on the local, regional, state, and national levels. In the process, these partnerships are likely to expand technological capabilities, increase the range of geographical access to sophisticated treatment modalities, and redefine the parameters of disease diagnosis, treatment, and management.

We are pleased to offer our support for these initiatives, which will enhance the provision of telehealth and telemedicine services regionally and nationwide.

Sincerely,

Douglas E. Van Houweling President and CEO, Internet2



Dr. Phred Pilkington Director of Public Health, Cabarrus Health Alliance 1307 S Cannon Boulevard Kannapolis, NC, 28083 04/30/2007

Dear Dr. Pilkington:

We are pleased to offer our support as a co-applicant for our proposal to pilot a regional health network to be carried out as a grantee under the FCC's Rural Health Care Pilot Program.

We understand that the proposal focuses on planning in year 1 and piloting in year 2 of the following elements:

- Sustainable technical and business models to support broadband connections between health providers and the public that are viable for rural areas of North Carolina.
- Sustainable technical and business models for health-improving applications that depend on broadband connections between providers and their patients- especially in rural areas of North Carolina. We understand that planning and selection of these applications is an activity for year 1 and piloting of them is a year 2 activity.
- Marketing and training programs that will assure appropriate adoption of the accessible applications by healthcare providers and their patients—especially rural non-profit and public providers.

We understand that this proposal is consistent with and supportive of the other work being done by the NC Association of Free Clinics and the Southern Piedmont Partnership for Public Health in the area of connecting public health with the public and other public health partners.

If the proposal as described is selected and funded, we agree to:

- Participate by engaging our selected pilot clinic sites that serve rural populations.
- Participate in developing the health-improving application definitions along with their business/process models.
- Participate in any initial marketing survey needed in year 1 and with marketing/training efforts in year two.

Sincerely,

Mike Darrow, CFRE Executive Director



May 2, 2007

Dr. Phred Pilkington Director of Public Health, Cabarrus Health Alliance 1307 S Cannon Boulevard Kannapolis, NC, 28083

Dear Dr. Pilkington:

We are pleased to offer our support for your proposal to pilot a regional health network to be carried out as a grantee under the FCC's Rural Health Care Pilot Program.

We understand that the proposal focuses on planning in year 1 and piloting in year 2 of the following elements:

- Sustainable technical and business models to support broadband connections between health providers and the public that are viable for rural areas of North Carolina.
- Sustainable technical and business models for health-improving applications that depend on broadband connections between providers and their patients- especially in rural areas of North Carolina. We understand that planning and selection of these applications is an activity for year 1 and piloting of them is a year 2 activity.
- Marketing and training programs that will assure appropriate adoption of the accessible applications by healthcare providers and their patients— especially rural non-profit and public providers.

We understand that this proposal is consistent with and supportive of the other work being done by the Southern Piedmont Partnership for Public Health in the area of connecting public health with the public and other public health partners.

We feel that NCCCN has a long-term interest in seeing facilities such as these be made viable as one way to improve health, lower costs, and improve care for all North Carolinians.

Page 2

Therefore, if the proposal as described is selected and funded, we agree to:

- Participate in developing the health-improving application definitions along with their business/process models.
- Participate in any initial marketing survey needed in year 1 and with marketing/training efforts in year two.

Yours truly,

Steven E. Wegner, MD JD

President





Dr. Phred Pilkington Director of Public Health, Cabarrus Health Alliance 1307 S Cannon Boulevard Kannapolis, NC, 28083

Dear Dr. Pilkington:

On behalf of the North Carolina Healthcare Information and Communications Alliance Inc. (NCHICA), a nonprofit organization established by Executive Order of the Governor of North Carolina in 1994 "to improve health and care by accelerating the adoption of information technology," we are pleased to write in support of a proposal that is being submitted by Southern Piedmont Partnership for Public Health and the North Carolina Association of Free Clinics to the Federal Communications Commission's Rural Health Care Support Mechanism, WC Docket No. 02-60.

North Carolina is a large state characterized by high degrees of diversity in its geography, in its population and in their access to healthcare, connectivity and other technology-based resources. The usual challenges that accompany the uptake of new technologies and operations are compounded in the rural 85 of North Carolina's 100 counties and over fifty percent of its population that are designated "rural". Significant technical, economic, cultural, and educational barriers exist to enabling the delivery of critical telehealth services and web-based resources in rural regions of the state. This complex web of challenges points to the need for creative, even experimental approaches to resolving the rural telehealth digital divide that exists in much of North Carolina.

Extensive discussions with many of the principals of our rural health care and connectivity providers have led us to join with the e-NC Authority in proposing a collaborative effort to coordinate telehealth pilot projects across the state in an approach that that we believe can best leverage our resources and those of the FCC. We believe that coordinated and facilitated information exchange will contribute strongly towards development and testing of promising policies and models with potential for replication across the country. Specifically, a number of promising region-based efforts are being discussed across our state, including several of which are being submitted to the FCC for consideration. With an appropriate structure for information and technology exchange there is an opportunity here to leverage investment made in the individual projects through the creation of a structured approach to information sharing that will support the diffusion of lessons learned, emerging best practices and innovative applications developed.

The e-NC Authority and NCHICA want to provide a strong message to the FCC that NC has the ability to coordinate across regions to provide a secure, interoperable functionality in support of FCC pilot projects so that lessons learned can be shared and that the individual efforts are strengthened. Both the e-NC Authority and NCHICA have significant experience leading successful state-wide multi-partner collaborative efforts related to connectivity. We are jointly committed to applying the considerable technical expertise, management and organizational skills and our rich statewide networks of public and private partners to ensure the success of each of the individual projects being submitted to the FCC to improve heath care in Rural North Carolina. Further, we are committed to working across these pilot projects to develop a statewide virtual collaboratory, a network of networks, that will support an integrated, information-rich statewide network of best practices.



Specifically, NCHICA will bring to the effort its experiences gained through its leadership and participation in the HHS Office of the National Coordinator for Health Information Technology contracts for the development of the Nationwide Health Information Network and the associated Privacy and Security Solutions for Interoperable Health Information Exchange with AHRQ and the NGA's State Alliance for e-Health.

Functionality and deliverables that will be brought by e-NC and NCHICA to the FCC proposals from organizations in North Carolina include the following:

Creation: Contribution to the Planning process:

- Assist individual projects with technical support for connectivity planning, vendor evaluation, and implementation. For example, e-NC staff works with partners to identify connectivity options and alternative approaches, develop project specifications and budgets and develop RFP, advise during vendor meetings and quote evaluation
- Work with project teams to plan for applying proven models for community outreach and education to increase awareness and use of telehealth services that are being created.
- NCHICA and e-NC have worked with and received indications of interest and support from communications providers including ARINC, AT&T, Embarq, ERC Broadband, Internet2, MCNC/NCREN, SCANA, Time Warner Cable, and others who are expected to be interested in becoming invoved with successful applicants.

Coordination and Evaluation

- Create a forum for collaboration across various telehealth projects across North Carolina to enable rapid transfer of emerging standards and best practices
- Host and facilitate regular progress meetings among various telehealth project groups
- Assist with development of rigorous evaluation metrics and processes for individual projects and for status of telehealth in the state overall
- Work with FCC to ensure distillation of lessons learned in highest-value format

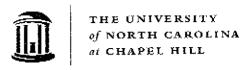
Communication

- Attend regional and national meetings to help project teams present models being developed to broader audiences
- Develop and maintain electronic information exchange structures to support what is envisioned as a NC Telehealth Virtual Laboratory
- Work with state, regional and FCC leaders to identify appropriate standards and policy issues emerging from the collective of projects funded in North Carolina.

We have reviewed the project plan developed by the Southern Piedmont Partnership for Public Health and the strength of the team that will implement it and strongly endorse it for funding consideration by the FCC. We further commit our time, expertise and resources to ensuring that, if funded, the project's success will extend throughout North Carolina and beyond.

Sincerely,

W. Holt Anderson Executive Director



SCHOOL OF PUBLIC HEALTH

THE NORTH CAROLINA INSTITUTE FOR PUBLIC HEALTH, CAMPUS BOX 8165 CHAPEL HILL, NC 27599-8165 T 919.966.1069 F 919.966.0478 www.sph.unc.edu/nciph

EDWARD L. BAKER, JR., MD, MPH

JOHN W. GRAHAM, PLD, PMP Deputy Director

May 7, 2007

Dr. Phred Pilkington Director of Public Health, Cabarrus Health Alliance 1307 S Cannon Boulevard Kannapolis, NC, 28083

Dear Dr. Pilkington:

On behalf of the UNC School of Public Health's NC Institute for Public Health, I am pleased to offer our support and encouragement for your proposal to pilot a regional health network in North Carolina through the Federal Communication Commission's (FCC) Rural Health Care Pilot Program.

This is of course a large and complicated project which will require some time complete the project layout with sufficient time to develop a thoughtful and comprehensive plan and the initiation of a pilot with a clear dissemination strategy are sensible steps in a project of this nature. In addition, I think the existence of ongoing regional partnerships, where local health departments and local healthcare providers have history of working together is promising. Finally, that the Southern Piedmont Partnership in particular is already heavily engaged in health information exchange activities, and that the Northeast Partnership for Public Health, which is a prototypical rural region, is such an enthusiastic supporter of this initiative, gives this initiative a leg up.

In line with the Public Health Informatics Institute, I also believe that building this project around a sustainable technical and business health application that is of value to providers and their rural patients and the recognition that marketing and training programs are needed to assure appropriate adoption of the applications are central to the success of this project.

If this proposal is funded, the UNC-CH School of Public health, through its NC Institute for Public Health will be as supportive as possible in your efforts. We would be pleased to participate in the definition and roll out of your project, collaborating with health departments to facilitate development and adoption of the HIE application and the rollout of the wireless technology solution.

Good luck as you move forward with this and other related projects.

With regards,

John Graham, Ph.D. Deputy Director



Northeastern North Carolina Partnership for Public Health

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Staff Barbara Earley RN, MSN Director PO Box 246 Winton, NC 27986 Phone 252.358.7833 Fax 252.358.7869 Dr. Phred Pilkington Director of Public Health, Cabarrus Health Alliance 1307 S Cannon Boulevard Kannapolis, NC, 28083

Dear Dr. Pilkington:

2523587869

The Northeastern North Carolina Partnership for Public Health (NENCPPH) governing board is pleased to offer our support for your proposal to pilot a regional telehealth network to be carried out as a grantee under the FCC's Rural Health Care Pilot Program. The NENCPPH region will act as the target to pilot the diffusion plan for the telehealth network in Year 2.

We understand that the proposal focuses on planning in year 1 and piloting in year 2 of the following elements:

- Sustainable technical and business models to support broadband connections between health providers and the public that are viable for rural areas of North Carolina.
- Sustainable technical and business models for health-improving applications that depend on broadband connections between providers and their patients- especially in rural areas of North Carolina. We understand that planning and selection of these applications is an activity for year 1 and piloting of them is a year 2 activity.
- Marketing and training programs that will assure appropriate adoption of the accessible applications by healthcare providers and their patients— especially rural non-profit and public providers.

We understand that this proposal is consistent with and supportive of the other work being done by the Southern Piedmont Partnership for Public Health in the area of connecting public health with the public and other public health partners.

If the proposal as described is selected and funded, the NENCPPH Governing Board agrees to:

- Participate in developing the health-improving application definitions along with their business/process models.
- Participate in any initial marketing survey needed in year 1 and with marketing/training efforts in year two.
- Participate in developing the diffusion plan for these innovations as an exemplar adopter region.

Yours truly.

Curtis W. Dickson, MEd.

Chairperson

Northeastern North Carolina Partnership for Public Health



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May 4, 2007

Dr. Phred Pilkington Director of Public Health, Cabarrus Health Alliance 1307 S Cannon Boulevard Kannapolis, NC, 28083

Dear Dr. Pilkington:

On behalf of the Public Health Informatics Institute I am pleased to offer our support and encouragement for your proposal to pilot a regional health network in North Carolina through the Federal Communication Commission's (FCC) Rural Health Care Pilot Program.

Your year 1 and 2 goals seem to be within your reach and, in my opinion, represent the appropriate first steps for a planning year followed by a pilot project year. It is important that you develop sustainable technical and business models for the rural setting to support broadband connections between health providers and the public. I support your logical approach to selecting sustainable technical and business health applications that add value to providers and their rural patients: planning and selection of these applications as a year 1 focus and piloting of them as a year 2 activity. I'm pleased that you recognize the importance of marketing and training programs that are needed to assure appropriate adoption of the applications by healthcare providers and their patients— especially rural non-profit and public providers.

We understand that this proposal is consistent with and supportive of the other work being done by the Southern Piedmont Partnership for Public Health in the area of connecting public health with the public and other public health partners.

If this proposal is funded, the Public Health Informatics Institute will be as supportive as possible in your efforts. We would be pleased to participate in your process for defining the health-improving applications and would be pleased to review the business process models upon which your applications will be defined. To the extent we can offer advice we are also pleased to reviewing and commenting on marketing surveys needed in year 1 and with marketing/training efforts in year two.

I wish you the best of luck in pursuing this funding opportunity. You have a very worthy approach and well written proposal. We have enjoyed working with your excellent technical team on our national programs. I know they will deliver a solid effort for FCC's Rural Health Care Pilot Program.

Sincerely,

David A. Ross, Sc.D.

Director



Rowan County Health Department 1811 East Innes Street – Salisbury, NC 28146-1338

May 3, 2007

Dr. Phred Pilkington Director of Public Health, Cabarrus Health Alliance 1307 S Cannon Boulevard Kannapolis, NC. 28083

Dear Dr. Pilkington:

Our department is pleased to offer support for your proposal to pilot a regional health network to be carried out as a grantee under the FCC's Rural Health Care Pilot Program.

We understand that the proposal focuses on planning in year 1 and piloting in year 2 of the following elements:

- > Sustainable technical and business models to support broadband connections between health providers and the public that are viable for rural areas of North Carolina.
- Sustainable technical and business models for health-improving applications that depend on broadband connections between providers and their patients- especially in rural areas of North Carolina. We understand that planning and selection of these applications is an activity for year 1 and piloting of them is a year 2 activity.
- Marketing and training programs that will assure appropriate adoption of the accessible applications by healthcare providers and their patients— especially rural non-profit and public providers.

It is understood that this proposal is consistent with and supportive of the other work being done by the Southern Piedmont Partnership for Public Health in the area of connecting public health with the public and other public health partners.

If the proposal as described is selected and funded, the department agrees to:

- Participate in developing the health-improving application definitions along with business/process models.
- Participate in any initial marketing survey needed in year 1 and with marketing/training efforts in year two.

Yours truly,

Leonard Wood, Director

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May 3, 2007

W. Holt Anderson
Executive Director
North Carolina Healthcare Information & Communications Alliance
3200 Chapel Hill/Nelson Blvd.
Cape Fear Building, Suite 200
P.O. Box 13048
Research Triangle Park, NC 27709

Dear Mr. Anderson:

SCANA Communications, Inc. (SCI) is pleased to offer our support to applications for funding under the FCC's Rural Health Care Pilot Program facilitated by your organization. We are confident these grant applications, if awarded, will provide tremendous benefits to rural citizens of North Carolina.

As a regional long haul telecommunications carrier, SCI can provide high bandwidth connections to other regions of NC or other states, including providing connections to other similar projects. SCI will be happy to respond to an RFP that may result from the grant application for services we offer.

Please let us know how we can be of further assistance in this very worthwhile project.

Sincerely

Larry G. Vincent Manager, Sales, Marketing & Customer Service



Dr. Phred Pilkington Director of Public Health, Cabarrus Health Alliance 1307 S Cannon Boulevard Kannapolis, NC, 28083

Dear Dr. Pilkington:

Time Warner Cable Business Class is pleased to offer our support for your proposal to pilot a regional health network to be carried out as a grantee under the FCC's Rural Health Care Pilot Program.

We understand that the proposal focuses on planning in year 1 and piloting in year 2 of the following elements::

- Sustainable technical and business models to support broadband connections between health providers and the public that are viable for rural areas of North Carolina.
- Sustainable technical and business models for health-improving applications that depend on broadband connections between providers and their patients- especially in rural areas of North Carolina. We understand that planning and selection of these applications is an activity for year 1 and piloting of them is a year 2 activity.
- Marketing and training programs that will assure appropriate adoption of the accessible applications by healthcare providers and their patients— especially rural non-profit and public providers.

We understand that in the case the project is selected and funded that we would be a potential applicant to provide wide-area Metro Ethernet and broadband services in support of the proposal's goals. We understand that the grantor (the FCC) is providing 85% of the costs involved in these products and services and that we are willing to provide the other 15% for services that we provide.

By way of this letter we are notifying you that, based on our current understanding of the project, we would have an interest in responding to an RFP created to seek services that are in our line of business.

Yours truly,

Richard Pitts General Manager, Time Warner Cable Business Class



Union County Health Department

1224 W. Roosevelt Blvd. • Monroe, NC 28110 • Phone (704) 296-4800 • Fax (704) 296-4887



April 30, 2007

Dr. Phred Pilkington Director of Public Health, Cabarrus Health Alliance 1307 S Cannon Boulevard Kannapolis, NC, 28083

Dear Dr. Pilkington:

We are pleased to offer our support for your proposal to pilot a regional health network to be carried out as a grantee under the FCC's Rural Health Care Pilot Program.

We understand that the proposal focuses on planning in year 1 and piloting in year 2 of the following elements::

- Sustainable technical and business models to support broadband connections between health providers and the public that are viable for rural areas of North Carolina.
- Sustainable technical and business models for health-improving applications that depend on broadband connections between providers and their patients-especially in rural areas of North Carolina. We understand that planning and selection of these applications is an activity for year 1 and piloting of them is a year 2 activity.
- Marketing and training programs that will assure appropriate adoption of the accessible applications by healthcare providers and their patients— especially rural non-profit and public providers.

We understand that this proposal is consistent with and supportive of the other work being done by the Southern Piedmont Partnership for Public Health in the area of connecting public health with the public and other public health partners.

If the proposal as described is selected and funded, we agree to:

- Participate in developing the health-improving application definitions along with their business/process models.

- Participate in any initial marketing survey needed in year 1 and with marketing/training efforts in year two.

Yours truly,

Hillsey Jenny Kirksey

Health Director